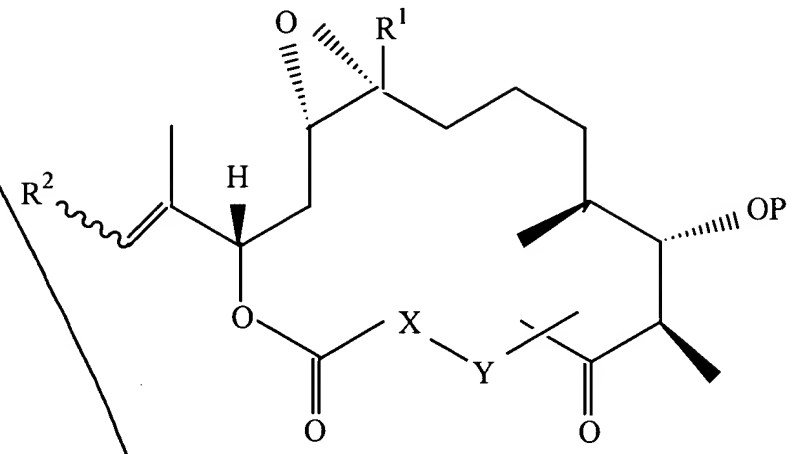
4. (Amended) Epothilone derivative of the formula (5)



wherein the residue R^1 is a hydrogen atom or a C_{1-8}-alkyl group, and P is a protective group and X-Y is a group of formula $-CH_2CH$-OP or CH=CH, and R^2 is a monocyclic aromatic which can be substituted by a halogen atoms and/or OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups in ortho- and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups as substituents, wherein the residues R^4, R^5 and R^6 independently are defined as R^1 in claim 1, but are independent of R^1, wherein

(i) XY is excluded as group of formula –CH=CH- if R^1 is a hydrogen atom or a C_{1-4}-alkyl group and R^2 is a monocyclic hetero aromatic having a N atom and/or a S atom in its ring and a C_1-alkyl substituent and

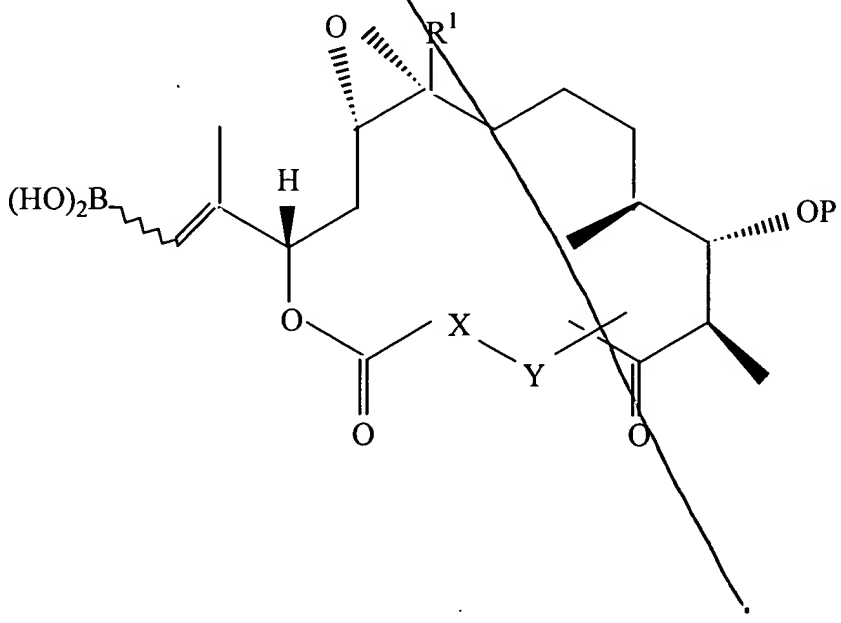
(ii) XY is excluded as group of formula $-CH_2$-CH-OP if R^1 is a hydrogen atom or a C_{1-4}-alkyl group and R^2 is a monocyclic hetero aromatic having a N atom and/or a S atom in its ring and a C_1-alkyl substituent.

6. (Amended) Epothilone derivative as in claims 1, 2, 3, 4, 5 or 22 wherein R^1, R^4, R^5 and R^6 are a hydrogen atom or a C_{1-6}-alkyl group.

7. (Amended) Epothilone derivative as in claims 4, 5, 6 or 22 wherein the substituents of the monocyclic aromatic and/or hetero aromatic are C_{1-6}-alkyl, C_{2-6}-alkenyl and C_{2-6}-alkinyl groups respectively, especially C_{1-4}-alkyl, C_{2-4}-alkenyl and C_{2-4}-akinyl groups, respectively and fluoro, chloro, bromo or iodo atoms.

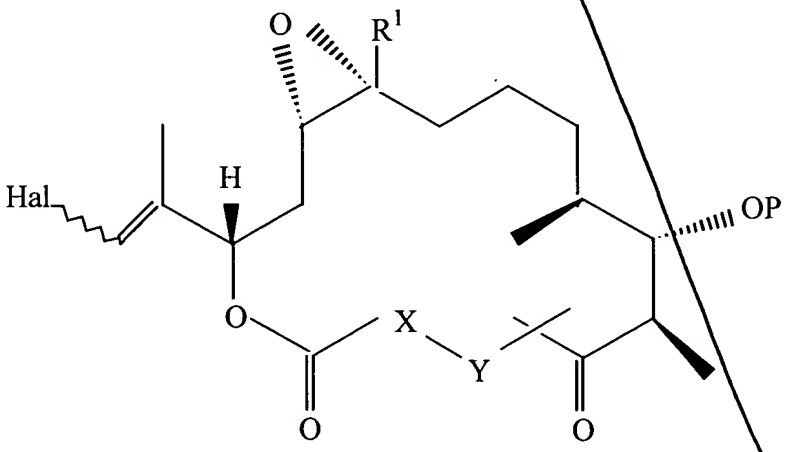
8. (Amended) Epothilone derivative as in claims 4, 5, 6, 7 or 22 wherein the aromatic and hetero aromatic, respectively, is provided with 1, 2 or 3 substituents and the hetero aromatic is provided with 1, 2 or more hetero atoms.

9. (Amended) Process for the preparation of a compound of formula (3),



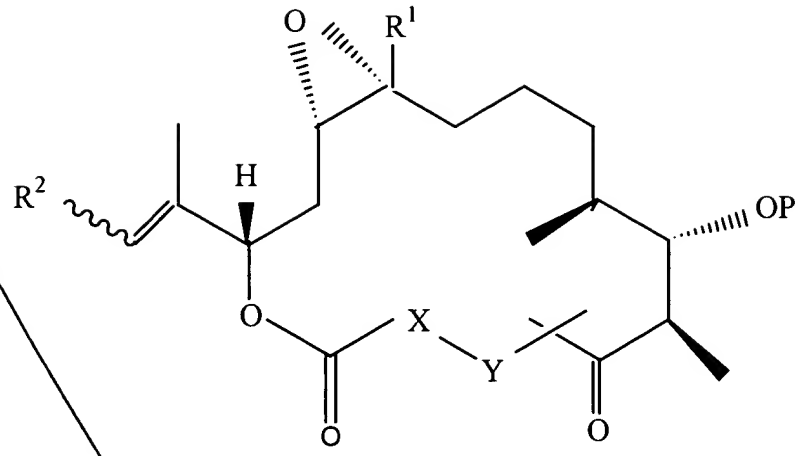
wherein a compound of formula (2) according to claim 1 is reacted with the compound of formula HC $[B(OR)_2]_3$ optionally in the presence of a base, wherein the residue R^1 is a hydrogen atom or a C_{1-8}-alkyl group, X-Y is a group of formula $-CH_2CH-OP$ or $-CH=CH-$, and P is a protective group, wherein X-Y is excluded as group of formula $-CH_2CH-OP$ if R^1 means a hydrogen atom or a C_{1-4}-alkyl group and R is defined as R^1, but is independent of R^1.

11. (Amended) Process for the preparation of a compound of formula (4),



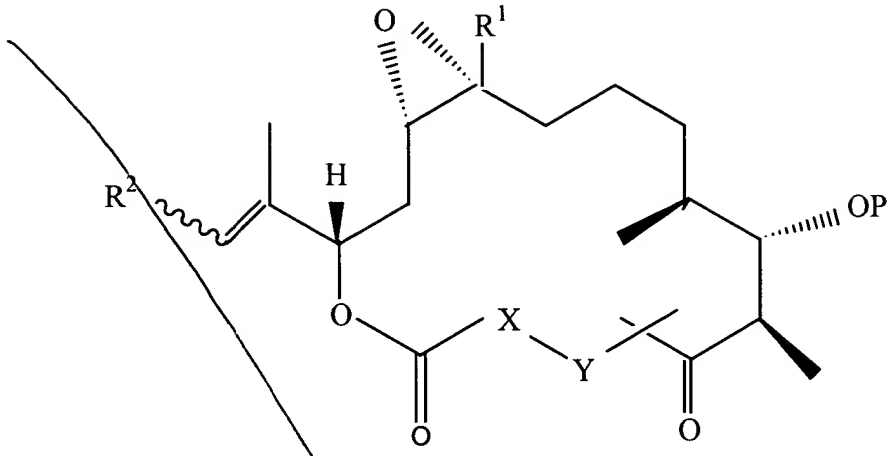
wherein a compound of formula (3) according to claim 2 is reacted with N-iodo- or N-bromo succcinimide and that the residue R^1 is a hydrogen atom or a C_{1-8}-alkyl group, X-Y is a group of formula $-CH_2CH-OP$ or $-CH=CH-$, and P is a protective group, wherein X-Y is excluded as group of formula $-CH_2CH-OP$ if R^1 means a hydrogen atom or a C_{1-4}-alkyl group.

12. (Amended) Process for the preparation of a compound of formula (5),



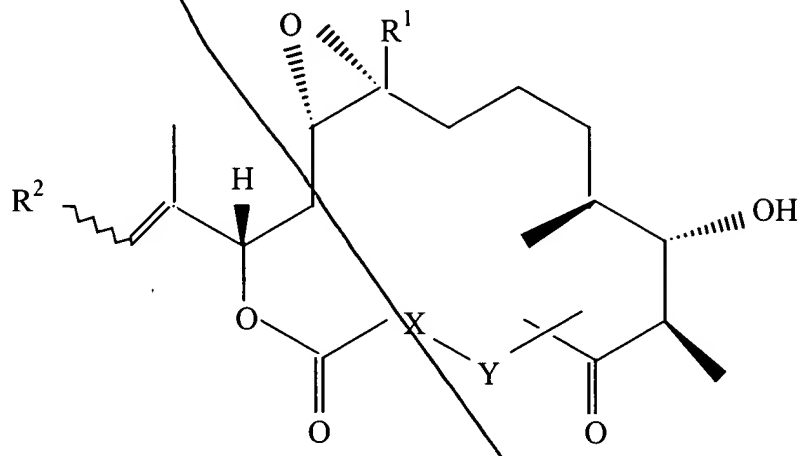
wherein a compound of formula (3) according to claim 2 is reacted by a Suzuki coupling with a compound of formula R^2-Z, wherein R^2 is a monocyclic aromatic which can be substituted by halogen atoms and/or OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups in ortho- and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups as substituents and Z can be a halogen atom or a group of formula $-OSO_2CF_3$, -CH=CHI, $-CH=CHOSO_2CF_3$.

12. (Amended) Process for the preparation of a compound of formula (5),



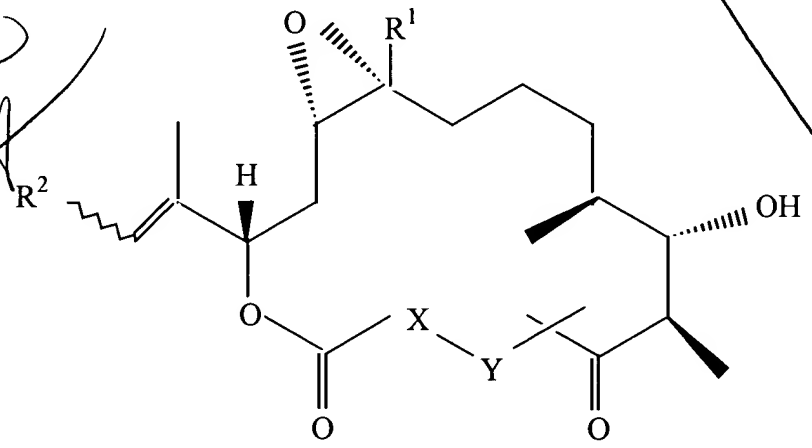
wherein a compound of formula (4) according to claim 3 is reacted by a silent coupling (stille Kupplung) with R_2-SNR^3_3, wherein R^2 is a monocyclic aromatic which can be substituted by halogen atoms and/or OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups in ortho- and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with OR^4- and/or NR^5R^6- and/or alkyl, alkenyl and/or alkinyl groups as substituents and R^3 is a C_{1-6}-alkyl group.

13. (Amended) Process for the preparation of a compound of formula (6),



wherein the protective group is removed from a compound of formula (5) according to claim 4.

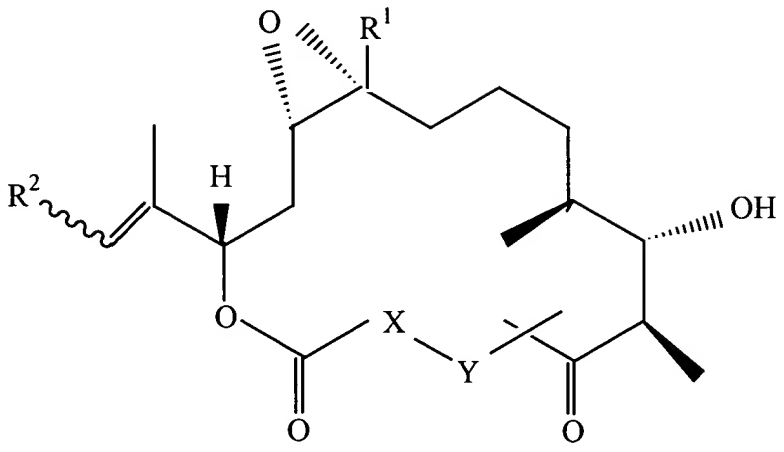
14. (Amended) Process for the preparation of a compound of formula (6),



wherein it comprises the process steps as disclosed in claims 9, 10, 11, 12 or 13.

16. (New) A pharmaceutical composition comprising at least one of the compounds described in claims 1, 2, 3, 4, 5, 6, 7, 8 or 22 and optionally carriers, diluents and/or auxiliary agents.

22. (New) Epothilone derivative of formula (6)



wherein the residues are defined as in claim 4 and, if X-Y means a group of formula $-CH_2CH-OP$, the protective group P has been removed , wherein

(i) XY is excluded as group of formula $-CH=CH-$ if R^1 is a hydrogen atom or a C_{1-4}-alkyl group and R^2 is a monocyclic hetero aromatic having a N atom and/or a S atom in its ring and a C_1-alkyl substituent and

(ii) XY is excluded as group of formula $-CH_2-CH-OP$ if R^1 is a hydrogen atom or a C_{1-4}-alkyl group and R^2 is a monocyclic hetero aromatic having a N atom and/or a S atom and/or an O atom in its ring and a C_1-alkyl substituent.

23. (Amended) Epothilone derivative according to claim 22, wherein the substituents of the monocyclic aromatic and/or hetero aromatic are C_{1-6}-alkyl, C_{2-6}-alkenyl and C_{2-6}-alkinyl groups respectively, especially C_{1-4}-alkyl, C_{2-4}-alkenyl and C_{2-4}-akinyl groups, respectively and the halogen atoms fluoro, chloro, bromo or iodo atoms.

20 24. (Amended) Epothilone derivative according to claim ~~22~~ 186, wherein the aromatic and hetero aromatic, respectively, is provided with 1, 2 or 3 substituents and the hetero aromatic is provided with 1, 2 or more hetero atoms.